yumeng ma

HUMAN-AI INTERACTION · ACCESSIBILITY · VISUAL & SOCIAL COMPUTING

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Education

University of Washington   *Seattle, WA*
PHD IN COMPUTER SCIENCE AND ENGINEERING (HUMAN-COMPUTER INTERACTION)   *Starting Fall 2024*
  Advisor: Jacob O. Wobbrock

Brown University   *Providence, RI*
SC.M IN COMPUTER SCIENCE   *2022 - 2024*
  GPA: 4.0 / 4.0
  Advisor: Jeff Huang

Arizona State University   *Tempe, AZ*
B.S. IN COMPUTER SCIENCE AND PSYCHOLOGY   *2019 - 2022*
  Barrett Honors College
  GPA: 4.0 / 4.0   Summa Cum Laude
  Thesis: "Assessing Exhibit Interaction through Bridging the Connections Between Biometrics and Traditional Tools"

Publications

* equal contribution

CONFERENCE PROCEEDINGS

Zainab Iftikhar, **Yumeng Ma**, and Jeff Huang. 2023. "Together but not together": Evaluating Typing Indicators for Interaction-Rich Communication. In Proceedings of the 2023 Conference on Human Factors in Computing Systems (CHI '23). *Paper*

Ian Gonsher, **Yumeng Ma**, Ivan Pineda-Dominguez, Matthew Lee, and Yuxin. 2023. The Mixed Reality Passthrough Window: Rethinking the Laptop Videoconferencing Experience. Human Interaction and Emerging Technologies (IHIET-AI 2023): Artificial Intelligence and Future Applications. *Paper*

SHORT PAPERS & EXTENDED ABSTRACTS

Yumeng Ma* and Jiahao Ren*. 2023. ProactiveAgent: Personalized Context-Aware Reminder System. In The 36th Annual ACM Symposium on User Interface Software and Technology (UIST '23 Adjunct). *Paper*

Research Experience

Brown Department of Neuroscience   *Providence, RI*
COMPUTER VISION RESEARCH ASSISTANT   *2023 - 2024*
- Built a visual prosthesis system for blind and low vision users to locate everyday objects and identify surrounding text.

UCLA HCI Lab   *Los Angeles, CA*
HCI RESEARCH INTERN   *2023*
- Led the development of a proactive reminder system that takes in user context, history, and spoken interactions by leveraging LLMs and personal agents.

Brown Department of Engineering   *Providence, RI*
DESIGN RESEARCH ASSISTANT   *2022 - 2023*
- Introduced a new paradigm for the integration of AR into laptop and desktop displays to enable local users to interact more easily and seamlessly with remote users during videoconferencing sessions.

Brown HCI Lab *Providence, RI*

D<small>ISTRIBUTED</small> R<small>ESEARCH</small> E<small>XPERIENCES FOR</small> U<small>NDERGRADUATES</small> I<small>NTERN</small> *2022*

- Designed novel typing indicators and found that they enhance user co-presence in written communication through in depth surveys and interviews.

ASU SoLET Lab *Tempe, AZ*

P<small>SYCHOLOGY</small> R<small>ESEARCH</small> A<small>SSISTANT</small> *2022*

- Conducted testing and evaluation of tutoring systems to optimize learning and educational practices for underrepresented groups.

NASA Psyche Mission *Tempe, AZ*

HCI R<small>ESEARCH</small> A<small>SSISTANT</small> *2021-2022*

- Developed a web app that allows users to interact with the Psyche Spacecraft model and led user studies with biometric data analysis that showed the app increased public engagement.

Work Experience

Infosys *Remote*

UI/UX D<small>ESIGN</small> I<small>NTERN</small>, L<small>IVING</small> L<small>ABS TEAM</small> *2024*

- Spearheaded the design of an accessible phygital UI that integrate emerging AI trends to optimize retail experiences for diverse user personas.

Brown + NASA *Providence, RI*

M<small>OBILE</small> D<small>EVELOPER</small> *2023 - 2024*

- Led and developed a sound and haptic-enabled cross-platform mobile app to help blind and low vision individuals explore and learn about space.

Civilience *Remote*

P<small>ROJECT</small> M<small>ANAGEMENT</small> & UI/UX D<small>ESIGN</small> I<small>NTERN</small> | L<small>IAISON BETWEEN FRONTEND AND</small> UIUX *2023*

- Led the UI/UX team to design a web-based app with interactive health data visualizations and built reusable components for a consistent design system across the product

Awards, Fellowships, & Grants

2024	**NSF Graduate Research Fellowship**, NSF
2024	**Paul G. Allen School Diamond Fellowship**, University of Washington
2019 - 2023	**Microsoft DisAbility Scholarship**, Microsoft
2022	**Google CS Research Mentorship Program Fellowship**, Google

Teaching

Spring '22	**CSE 365 Information Assurance**, TA for Adam Doupe and Tiffany Bao, ASU

Extracurricular & Work Activities

2021 - Present	**Member**, AccessComputing	
2022 - 2024	**Master's Representative**, Brown University CS Diversity Committee	*Providence, RI*
2023	**Student Volunteer**, UIST	*San Francisco, CA*
2020 - 2021	**Microsoft Support / Xbox Advocate Contract**, Microsoft	*Tempe, AZ*

Skills

Programming	Python, C/C++, C#, Java, Unix/Linux, ROS, APIs, Git
Web/Mobile	HTML, CSS, Javascript, Typescript, React, React Native, Vue
Game Dev	Unity, OpenGL
Data	Jupyter Notebook, MySQL, MATLAB, JSON
Design	UI/UX, Adobe Creative Suite, Figma, Wireframing, Fusion360, Blender